ORIGINAL

SOUTHWEST GAS CORPORATION

July 31, 2008

Docket Control Office
Arizona Corporation Commission
Utilities Division
1200 West Washington Street
Phoenix, AZ 85007

Re: Docket No. G-01551A-04-0876; D.69667

Southwest Gas Corporation (Southwest) herewith submits for filing an original and thirteen (13) copies of its request for a three-year continuation of its Technology Information Center demand-side management program.

If you have any questions or comments on the attached report, please do not hesitate to contact me at 702-876-7163.

Respectfully submitted,

Debra S. Gallo

Debra S. Gallo, Director
Government & State Regulatory Affairs

Enclosures

c Mr. Ernest Johnson, ACC
Compliance Section, ACC
Mr. Janice Alward, ACC
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SOUTHWEST GAS CORPORATION

TECHNOLOGY INFORMATION CENTER PROGRAM

DOCKET NO. G-01551A-04-0876
DECISION NO. 69667

JULY 31, 2008

TECHNOLOGY INFORMATION CENTER

PROGRAM OVERVIEW

Program Description

The Arizona Corporation Commission (ACC) approved Southwest Gas Corporation's (Southwest or the Company) Technology Information Center (TIC) Program as a pilot program on June 28, 2007, in Decision No. 69667. This program is designed primarily for Southwest's large commercial, industrial and transportation-eligible customers, a widely-varying group that can be particularly difficult to reach. Participants receive a monthly electronic newsletter containing technical information on energy-saving equipment and processes to enable them to make informed energy and environmental decisions. Features include the "Ask an Expert" hotline, and an electronic research library. The Key Account Managers and the Demand Side Management (DSM) department, use an administrative feature made available by Questline to track customer interest in various topics and use it as a tool to aid in the development of future DSM programs.

Newsletter stories published during the pilot program year include the following subjects:

- Winter fuels outlook
- Standby generation
- Heating conservation
- Boiler load management
- Combined heat and power – distributed generation
- Energy performance contracts
- Energy benchmarking
- Controlling energy costs in manufacturing facilities

Program Update

After the TIC received approval as a DSM program, Southwest took several steps to ensure its value as a DSM tool for its large Arizona customers. DSM held informational meetings with Questline and Key Account Managers to update them on the DSM aspects of the program, and reacquaint them with the wide variety of tools available through the newsletter service. Southwest also changed the name of the newsletter to *Energy Line* and created a calendar of articles that were designed to focus heavily on energy efficiency, conservation, and other related topics of interest to the Company's Large Customers (those customers who are served under Southwest's Large General, Transportation-eligible, Optional, Gas Air-Conditioning, Electric Generation, or Natural Gas Engine Gas Service tariffs). Please see Appendix A for samples of *Energy Line.*

In conjunction with the newsletter company, Questline, Southwest developed an online survey for readers of *Energy Line* to determine its value in making energy decisions, among other objectives. The survey was approved by ACC Staff, as required in Decision No. 69667, and implemented in February 2008. The results are summarized below and the complete survey and results is included in Appendix B. Due to the positive results received from the survey, Southwest made the decision to file for continuing program approval.

Survey Summary

Surveys were e-mailed twice in the first quarter of 2008, to a total of 120 recipients, with a total of 20 completed surveys returned within two weeks. One hundred percent (100%) of respondents find the *Energy Line* "somewhat" or "very valuable," and eighty-nine percent (89%) find the information "somewhat" or "very helpful" in making energy decisions, with eighty-three percent (83%) passing the information on to others involved in making energy decisions. Rate information and energy pricing forecasts received the highest interest ranking, with energy management and energy-saving technologies a close second. Approximately one-third (31%) of recipients have taken steps to improve energy-efficiency as a result of information provided in *Energy Line*. One hundred percent (100%) of recipients said they plan to make energy-related changes in their business during the next two years. The greatest interest in energy-efficiency programs was related to equipment replacement (18%) followed by peak shaving (17%) and combined heat and power (15%). Seventy-four percent (74%) of recipients requested a free energy consultation from Southwest, with seventy-three percent (73%) wanting it within six months or less.

The survey results clearly demonstrate the value of *Energy Line* to Southwest's Large Customers, and speak to the desirability of continuing the Technology Information Center Program.

Program Objectives and Rationale

The program has various benefits for Southwest's large consumers, including:

- Energy-saving and energy-efficiency ideas
- Proactive environmental education
- Current energy issues information
- Communication with Southwest

Products and Services Provided

Southwest contracts with Questline, an energy newsletter provider, who sends a customized newsletter called *Energy Line* to Southwest's Large Customers every month. The Company provides recommendations on specific articles to Questline, as well as edits to each newsletter's content prior to distribution. The goal is to ensure a focus on energy-savings and energy-efficiency information, equipment and strategies.

There is a feedback mechanism in the newsletter that allows customers to offer comments or ask questions on the stories or information provided. The "Ask An Expert" hotline also tackles any customer question, even if unrelated to actual newsletter content.

Opportunities

The newsletters afford Southwest the opportunity to keep issues such as energy efficiency and DSM in front of the Company's Large Customers every month.

The newsletters can also introduce new technologies and provide information that is useful in corporate planning and budgets for Large Customers.

TARGET MARKET

Customer Type

The TIC Program is targeted toward customers served under Southwest's Large General, Transportation-eligible, Optional, Gas Air-Conditioning, Electric Generation, or Natural Gas Engine Gas Service tariffs. In addition, architects or engineers who express an interest in receiving the newsletter may also receive the newsletter. All of these classes of customers can have a large impact on energy conservation and DSM.

Program Eligibility Requirements

While this program is intended for the Company's Large Customers, other non-residential customers may also receive it, if they express interest. In fact, any reader who receives the newsletter as a forwarded e-mail from a subscriber can sign up to receive it directly. Although the emphasis is on customers in Southwest's Arizona service areas, it is possible for non-Arizona recipients to also receive it by self-subscribing in the aforementioned manner. It is important to note that the cost to Southwest is not affected by the number of customers to whom the newsletter is sent nor their location.

Numbers of Potential Customers

Currently 140 Arizona customers are receiving the newsletter, which represents an additional 20 customers added since the beginning of 2008. Southwest would propose to expand the subscription base in 2009 to include more large commercial customers. The potential number of customers is estimated as follows:

2008 – 150 customers
2009 – 300 customers

Estimated Level of Program Participation

The estimated level of program participation in 2008 and 2009 reflects the number of potential customers, as follows:

2008 – 150 customers
2009 – 300 customers

ENERGY MEASURES

Baseline (Existing) Measures

Southwest does not have data regarding the types of equipment or the equipment efficiencies which could be installed in response to the newsletter articles. This data varies by customer and is diverse in nature. Much of this information is proprietary. As such, a baseline energy analysis is not feasible.

DSM Measures

Because the program is educational in nature, Southwest cannot provide accurate or meaningful energy savings estimates. However, the Company believes that savings will occur as Large Customers increase their awareness of high-efficiency equipment and begin utilizing that equipment in their operations.

IMPLEMENTATION PLAN

Marketing and Delivery Strategy

The availability of the TIC Program is communicated to Southwest's Large Customers by Key Account Managers and Commercial Service Planners. Architects or engineers who express an interest in the newsletter may also receive the newsletter upon request. These two program targets could potentially communicate newsletter information to their clients.

MEASUREMENT AND EVALUATION

This program is measured by the number of e-mail newsletters sent to customers, the percentage readership, popularity of topics, the number of calls to the hotline, and the results of a value survey.

Newsletters distributed: Ten (10)
Newsletter customers: 140
Readership since February 2008:

- 56% of customers have opened at least one newsletter
- 65% of customers have viewed more than one issue
- 66% of customers have clicked to view the full article or feature of the service from the email message, such as Ask an Expert, the E-Library, Tools, etc.

BUDGET

The requested budget for this program is $35,000 annually. Southwest intends to continue this program and allocate funds through the Demand Side Management Adjuster Mechanism (DSMAM) until directed otherwise by the Commission.

Technology Information Center Requested Budget	
DESCRIPTION	Budget
Implementation	$ 33,000
Administration	2,000
Total	**$ 35,000**

2007 SPENDING

The first DSM Energy Line newsletter was sent out in October 2007. The costs incurred in 2007 are listed below.

Technology Information Center Expenses 2007			
DESCRIPTION	Budget	Total	(Over)/Under
Implementation	$ 33,000	$ 15,000	$ 18,000
Administration	2,000	479	1,520
Total	**$ 35,000**	**$ 15,479**	**$ 19,521**

COST-EFFECTIVENESS TEST RESULTS

Because this program is primarily educational in nature, Southwest does not have the data necessary to demonstrate cost-effectiveness test results. However, the Company believes that as energy issues continue to be of growing importance to society, the information sent to these Large Customers will be read and taken into consideration. Ultimately, as companies replace equipment or undergo general remodeling, many of the DSM and energy efficiency measures advocated through the TIC Program are likely to be implemented.

Societal Costs

As with the estimated energy savings, Southwest is unable to provide an estimate of related societal benefits. However, there may well be advantages, such as decreased air pollution or water savings, as a result of the higher-efficiency technologies adopted by industrial and commercial customers through this program. It is a well-known fact that the energy requirements for industrial equipment can be extremely large on a per-unit basis. Therefore, any reduction in these requirements by the installation of higher-efficiency equipment will have a significant, positive impact on energy production, consumption, and the environment.

PROGRAM RECOMMENDATION

Southwest believes the feedback and data tracked through this program will assist in determining what types of energy efficient measures would be of interest to industrial and large commercial customers and could then be evaluated as potential DSM programs. Considering the value of the TIC Program to Southwest's industrial and transportation-eligible customers, the Company recommends a three-year continuation of the program at the funding level of $35,000 annually.

APPENDIX A
Technology Information Center Program

ENERGY LINE Newsletter

Energy Benchmarking Your Facility

With rising energy costs and increased environmental awareness, more companies are becoming concerned with conservation and energy efficiency. Before incorporating an energy management program or embarking on an energy efficiency project, it would be a good idea to know how well your facility is currently doing from an energy efficiency standpoint. It is easy to find out how much you are spending on energy simply by examining your energy bills. However, this does not necessarily tell you *how* you are doing. For a good frame of reference, it would be useful to compare the energy consumption of your buildings and systems to similar facilities, particularly ones that have been recognized as energy efficient or have instituted energy best practices. Energy benchmarking is a useful tool in helping to gain this frame of reference and in analyzing the energy performance of your facility.

You Might Also Be Interested In...

Energy Self-Audit: Tools You Can Use

Energy Saving Intelligent Controls for Refrigeration

How to Implement an Energy-Saving Project

The concept of benchmarking began in the manufacturing sector as a component of total quality management (TQM). It was used as a performance measurement tool by which companies would compare themselves against their competitors as a means to instituting process improvement measures. Energy benchmarking is the collection and analysis of data that provides facilities with a context for comparing energy efficiencies. Armed with this information, facility managers can spot inefficiencies, identify energy saving opportunities, and monitor performance improvements over time.

What Are the Benefits of Energy Benchmarking?

Why Perform Energy Benchmarking?

- As part of a total quality management program.
- To compare performance against similar facilities.
- To target inefficiencies and identify energy savings opportunities.
- To monitor performance of energy efficiency improvement projects.

- Prioritize your energy investments. Across your building portfolio, benchmarking provides a foundation for making solid energy management decisions.
- Determine potential savings. By comparing benchmarking "scores," you can assess the cost-savings potential of improving efficiencies.
- Monitor changes. Scoring a building's or system's energy performance over time can help in evaluating energy efficiency measures.
- Be aware of peak demand periods and their impact on your energy bill. Energy use patterns should be viewed in conjunction with demand charges and time-of-use rates.
- Positive publicity. Documenting superior energy performance provides a basis to communicate a "green" image.

Steps in Energy Benchmarking

Any benchmarking effort should follow a specific framework for gathering useful information to serve as a point of reference to plan and implement improvement measures. Energy benchmarking is not merely a one-shot deal, but a continuous process of measurement and improvement. The following are the key steps in a typical energy benchmarking program.

1. Identify Core Issues

Initially, it is important to develop a set of performance metrics, which will make up your dataset for comparison. Performance metrics for energy benchmarking include energy cost and energy consumption. These are typically normalized to area, such $ per square foot for cost and Btus or kWhs per square foot for consumption. It is also important to take into account factors such as weather (measured in heating and cooling degree days), type of facility, number of occupants, operating hours, etc.

At this stage, it is important to identify the scale of what you intend to measure. You can focus on the entire building by area or concentrate on specific systems, such as lighting or HVAC. You can also measure total energy consumption or separate by fuel, such as electric and natural gas. In some manufacturing sectors, traditional measurements, such as energy per square foot, do not adequately address process energy, whose loads can create widely varying power and fuel densities. In this instance, more creative measurements, such as consumption based on production or shipment levels, may provide more insight.

2. Gather Internal Data

In this step, put together a year's worth of consumption and spending data for electric, natural gas, and other fuels. Work with your local utility to locate any information that is not readily available. While monthly energy bills are useful energy-performance indicators, analyzing daily consumption patterns may provide more insight into identifying problems in systems and different facilities. Therefore, consider installing meters and other measuring instruments to monitor energy consumption at daily or hourly intervals as part of your benchmarking program. This can also be helpful in identifying energy consumption of specific systems or facility areas.

Next, tabulate your total energy consumption per year. This should include total consumption, cost, and other factors such as peak demand. Establish your energy intensity indicators in terms of energy use per unit area. For example, take your total energy consumption per year for your facility and divide it by the total square footage.

3. Gather External Data

This is a critical step, in which you obtain energy consumption profiles from similar organizations in order to make meaningful

comparisons. If possible, obtain data from facilities most similar to your own in size and type, hours of operation, climate zone, etc. There are limitations among the existing data sets. In some industry sectors, there will be more information available than in others.

Good data sources include industry associations or organizations that specialize in cooperative benchmarking programs. An excellent resource is the commercial and industrial benchmark data available in the "Tools You Can Use" menu at the top of this page. Choose your industry segment and view energy intensity data and selected business ratios. Another good source of information is the U.S. Energy Information Administration's Commercial Building Energy Consumption Survey and Manufacturing Energy Consumption Survey. These surveys provide detailed energy consumption and intensity data broken down by building type, energy systems, building size, climate zone, etc.

4. Analysis

The analysis phase allows facilities to make meaningful comparisons and test their energy performance against similar facilities. Ideally, an analysis should provide a picture of overall energy performance, as well as a breakdown across the facility of where the energy is being used on-site. The goal is to target priority areas for attention and to spot energy savings opportunities.

A useful tool is the ENERGY STAR® Portfolio Manager, a free online software tool for tracking energy and rating the energy performance of selected building types. The tool enables users to track energy consumption and cost, benchmark against past performance, and determine energy performance ratings based on a scale of 1 to 100.

Another approach to benchmarking is to use a point-based rating system. An example is the U.S. Green Building Council's Leadership in Energy and Environmental Design (LEED) Rating System. The LEED Rating System is a voluntary, consensus-based, rating system for evaluating environmental performance from a "whole building" perspective, providing a framework for defining a "green" building. It is a system where credits are earned for satisfying each criteria. Different levels of green building certification are awarded based on the total credits earned. The system is designed to be comprehensive in scope, yet simple in operation. The LEED system includes specifications and criteria for commissioning, energy efficiency, erosion control, indoor air quality, thermal comfort, plus water conservation and quality. LEED does not allow for quantitative comparisons between different buildings, but does outline a series of "best practice" standards and guidelines that can be used to evaluate how "energy efficient and environmentally sustainable" a facility is overall.

5. Implement Change

The final step in a benchmarking program is to target areas for improvement, implement efficiency measures, and monitor the impact over time. It is important to remember that energy benchmarking is an ongoing process in which the focus is on constant improvement.

Once you have identified areas for improvement, it is time to take action. As a first step, check out our Commercial and Industrial Energy Efficiency Recommendations in the "Tools You Can Use" menu. These provide specific energy improvement suggestions by business segment and energy end use (lighting, space heating, etc.). In addition, you can use our Facility Assessment Wizard, in which, after answering a set of questions about your facility, you can receive a tailored set of recommendations that can help to improve the efficiency of your systems.

More advanced energy management procedures can lead to long-term energy savings. For more information, see Best Practices in Energy Management. Many facilities may also want to certify their energy performance through rating systems, such as ENERGY STAR® and LEED, as a way to track their progress and publicize their commitment to energy efficiency and environmental sustainability. See Your Building Can Become An ENERGY STAR® and Greening Your Existing Building.

How would you rate the quality of this content? Select a star rating and click submit below

Comments or suggestions for additional content: (optional)

Submit Rating / Comments

APPENDIX B
Technology Information Center Program

Survey and Results

2008 SWGas TIC Survey Results

Published: 3/6/2008

Survey conducted by Tech Resources, Inc. – www.questline.com

Survey Overview

Description
SW Gas TIC Survey

Instructions Provided To Respondents
We hope you are enjoying your free subscription to the Southwest Gas Energy Line newsletter and find it valuable. Please complete the following survey, which should take no more than 10 minutes. Your responses will be kept confidential, and the information you provide will help us improve Energy Line.

Respondent Metrics
Respondents: 20

First Response: 2/22/2008 01:06 PM

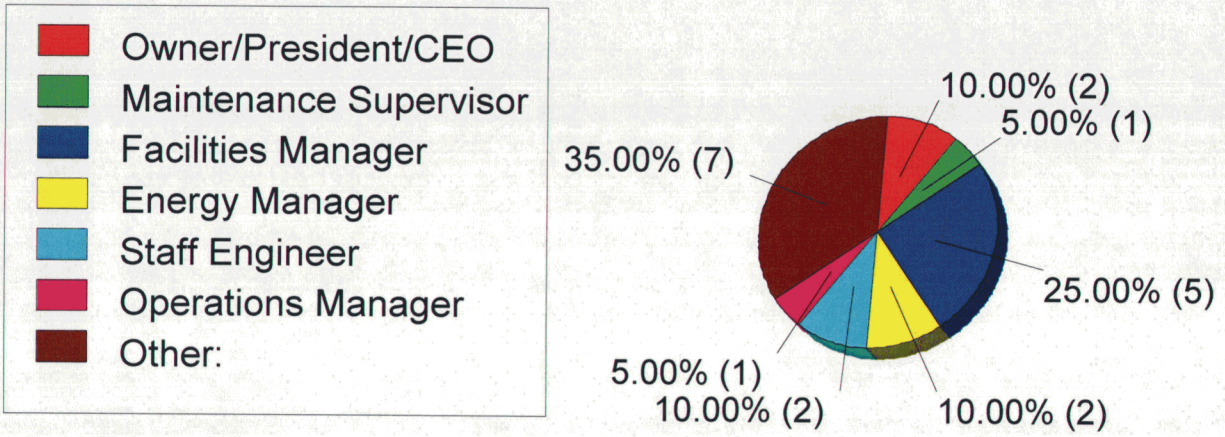
Last Response: 3/5/2008 02:45 PM

Survey Results

The following is a graphical depiction of the responses to each survey question. Additional comments provided by respondents, if any, are included after each graph.

Section - Survey Questions

1. What is your position within your company? Select the one that most applies.



Comments/Notes for "Other:":

Accountant

Cost analyst

Director

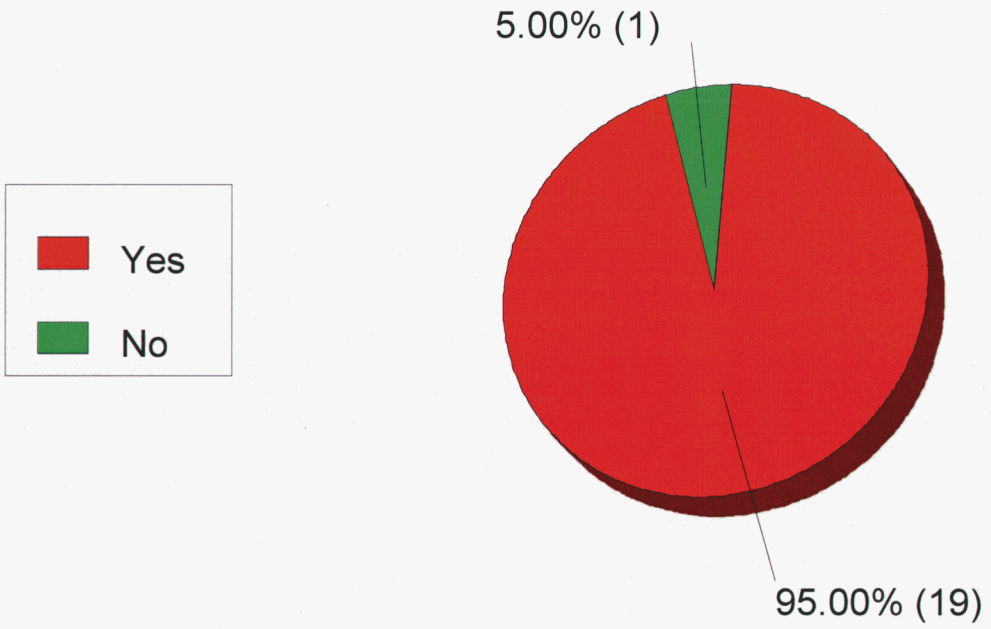
Division Controller

Principal Facilities Engineer

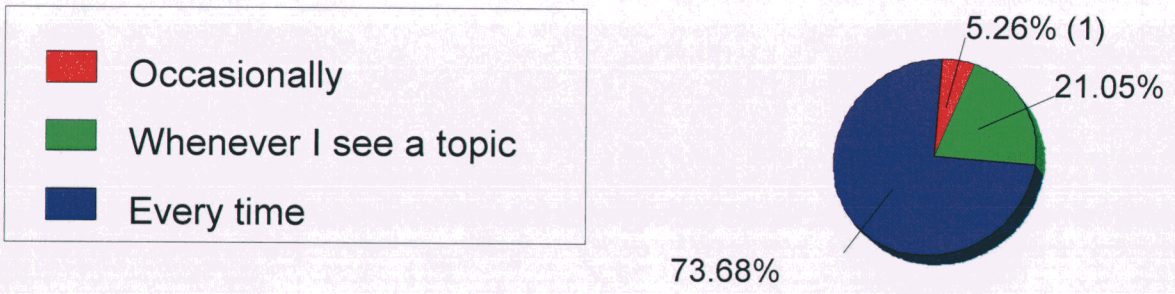
Utility Accountant

Vice President

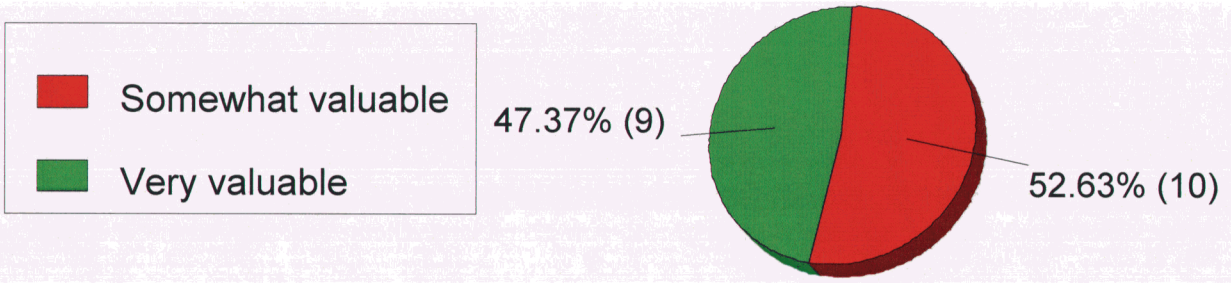
2. Have you noticed the monthly Energy Line (formerly GasLine) newsletter in your mailbox?



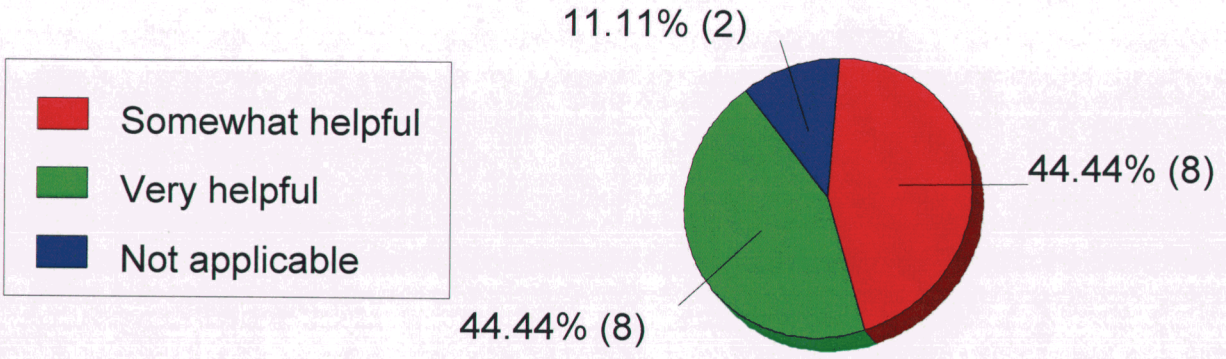
3. If Yes, how often do you open the Energy Line email?



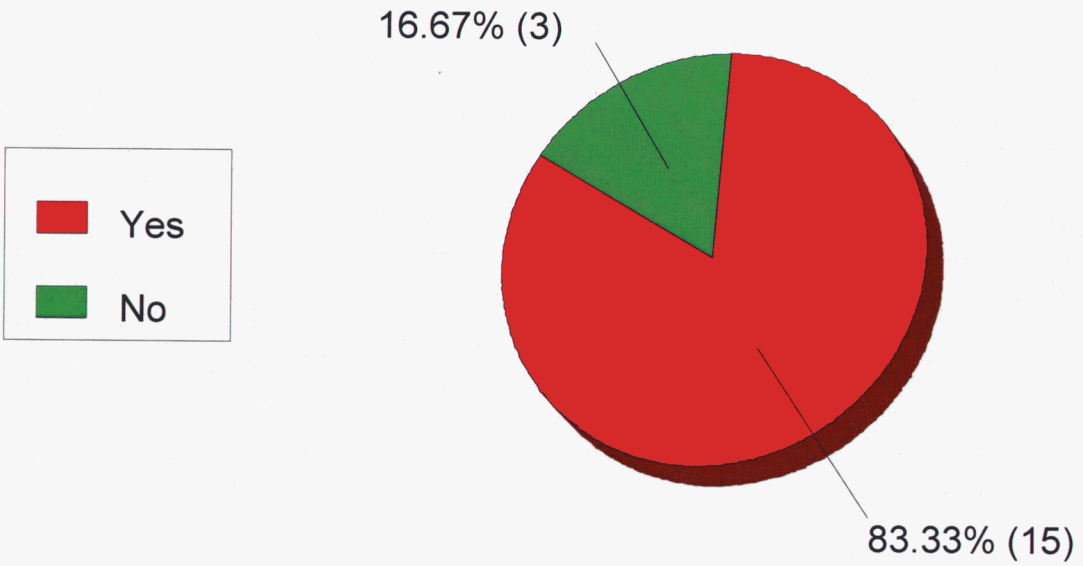
4. If you read Energy Line, how valuable to you is the information presented?



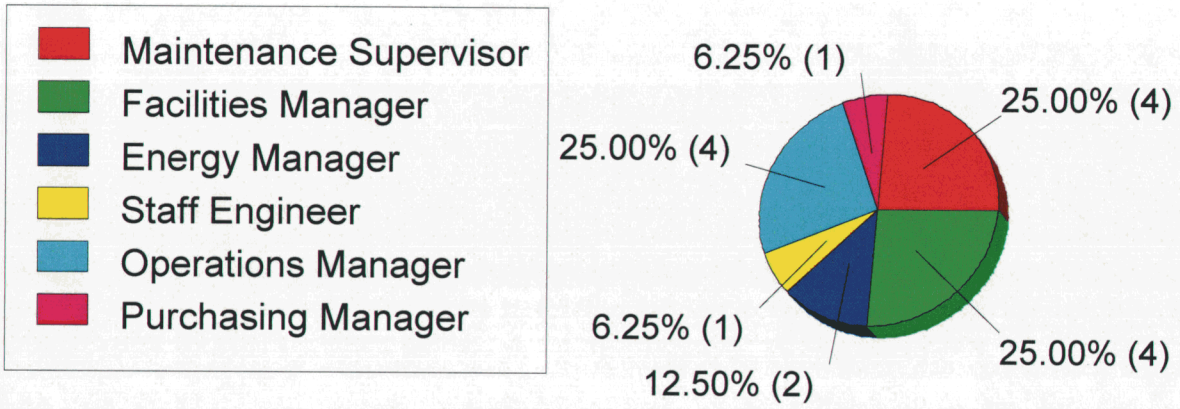
5. If you read Energy Line, how helpful is the information in making energy decisions?



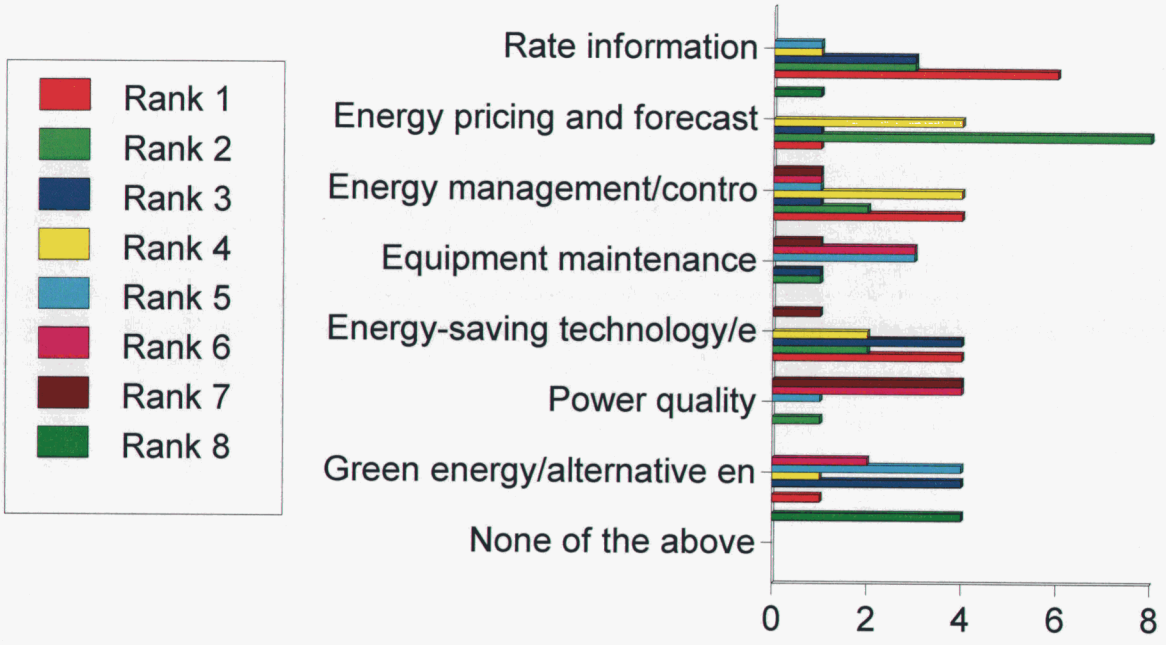
6. Have you ever passed along information found in Energy Line to others in your company involved in making energy decisions?



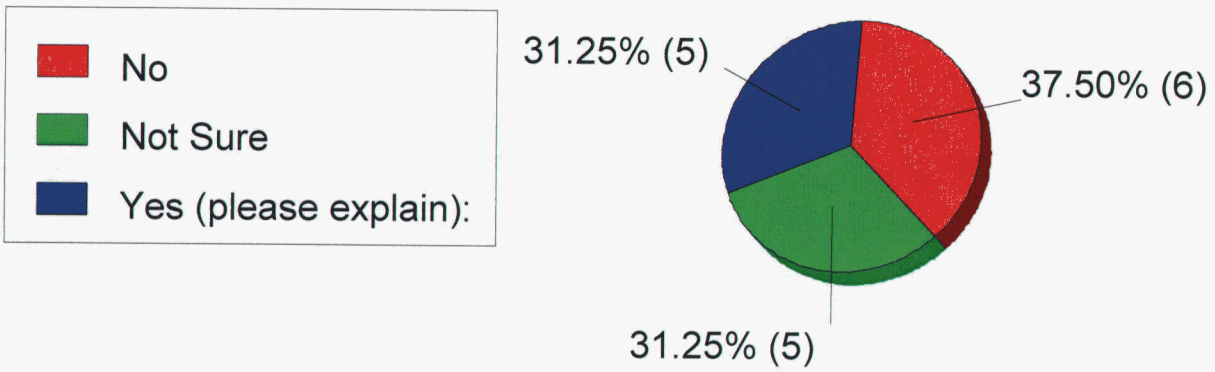
7. Who else within your company should receive Energy Line? Check all that apply.



8. What types of energy-related topics are you most interested in learning about? Rank them by number with 1 being the topic you are most interested in.



9. Has your company taken any steps to improve energy efficiency as a result of any information provided in Energy Line?



Comments/Notes for "Yes (please explain):":

Better maintenance

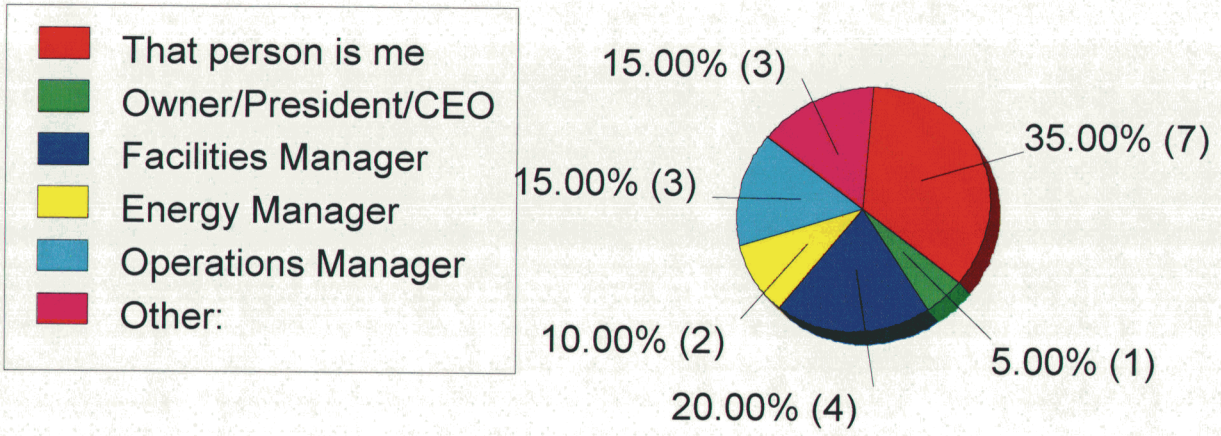
Green Lights, gas-fired pumps

Hired full time Energy Manager

New burners

Procurement of Gas

10. Who in your company is most responsible for major energy decisions (such as process changes, purchases of new types of equipment, etc.)?



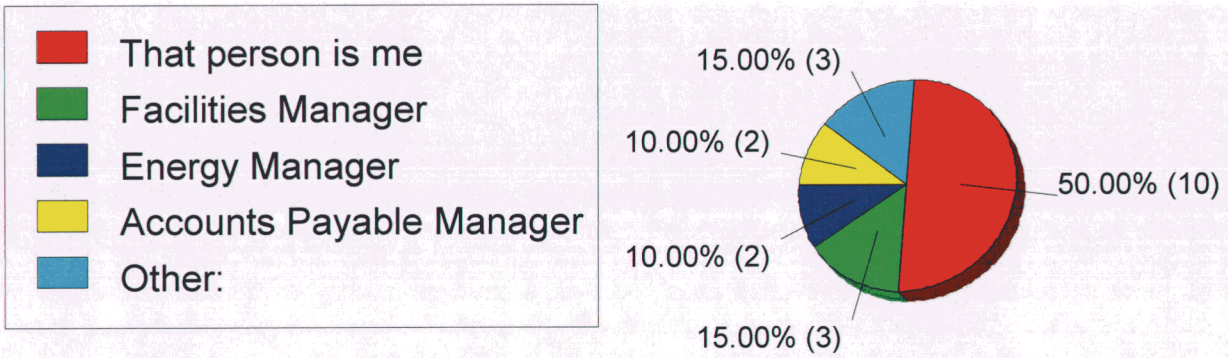
Comments/Notes for "Other:":

Corporate approval

Engineers

Power Team

11. Who is most responsible for reviewing monthly energy bills to determine if they appear reasonable?



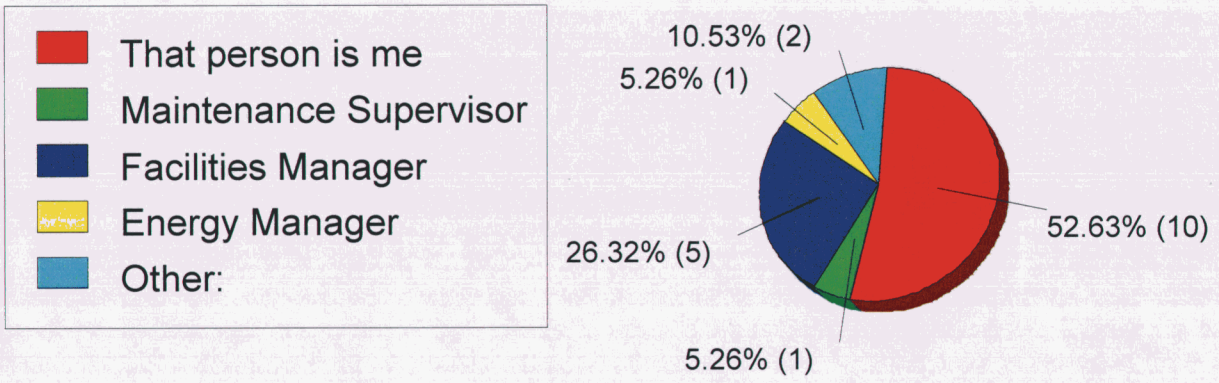
Comments/Notes for "Other:":

Power Team

Principal Facilities Engineer

Utility Accountant

12. Who is most responsible for recommending replacement equipment or processes that are more energy efficient than currently in use by your company?



Comments/Notes for "Other:":

Engineers

Equipment Engineers

13. How often are major, non-emergency energy decisions made by your company? (Such as replacement of equipment; additions of new equipment, changes in or additions to current processes, etc.)